REMARKS

The following are applicant's response to issues raised in the Office Action.

Claims 1-17 are pending. Claims 1, 7 and 16 have been amended. Applicants respectfully request entry of this amendment in order to move the instant application toward allowance or alternatively, to place the application in better form for appeal.

Rejection under 35 USC 102 and 103

Claims 1-4, 7, 11-13 and 15 were rejected under 35 USC 102 over Rosenberg (U.S. patent publication no. 2002/0003528). Rosenberg discloses a Cursor Control Using a Tactile Feedback Device.

Claims 5, 6, 8-10, 14, 16 and 17 were rejected under 35 USC 103 over Rosenberg (U.S. patent publication no. 2002/0003528) in view of Barber (U.S. patent no. 5,973,670). Barber discloses a Tactile Feedback Controller for a Computer Cursor Control Device.

Neither Rosenberg, nor Barber teach, disclose or suggest as in amended independent claims 1, 7 or 16 suppressing the sensing of cursor control during the activation of the tactile feedback apparatus.

The office action states that the suppression of the cursor control is shown in paragraph 127 of Rosenberg. Paragraph 127 is reproduced below.

[0127] In step 312, mouse based forces are calculated using the reference data. "Mouse based forces" are those force sensations designated to be based on reference

data in method 300 (and 400), i.e., based on position or motion of the mouse rather than on the cursor. In the preferred embodiment, such force sensations include damping, inertia, and friction (based on velocity or acceleration). As explained with reference to FIG. 6, these force sensations are more realistically modeled using the reference data rather than the ballistic data. In addition, "clipped" spring forces are preferably mouse-based force sensations (based on mouse position). Clipped spring forces differ from visual spring forces in that clipped spring forces have no visual component, i.e., the cursor does not move during the output of the spring force. Thus, no possibility of a visual-haptic dichotomy exists and the spring force can be calculated using the reference data. If there are multiple mouse-based force sensations to be output, then those forces are all determined using the reference data in step 312 and are summed to get a final mouse-based force.

Paragraph 127 does not state that the cursor sensor or control device is suppressed or disabled. Paragraph 127 describes a clipped spring force. In order to understand what a clipped spring force is, reference is made to the definition of clipping in paragraph 121

[0121] For example, "clipping" can be used in some situations to purposely report a cursor position that does not correspond to the mouse position in the local frame 30. Clipping is typically used to provide an illusion to the user that a hard surface is being encountered with the cursor. For example, when the cursor 180 is moved against a wall surface, an obstruction force having a large enough magnitude force to physically stop

7

the user's motion usually cannot be output due to actuator limitations. Thus, to create the illusion of a hard surface, the user is allowed to move the mouse into the wall against the obstruction force, but the cursor remains displayed against the surface of the wall as if it is impenetrable. Since the user's experience depends heavily on the visual motion of the cursor, an illusion of an impenetrable wall is maintained. To perform this illusion, the reference data from the mouse 12 is "clipped", i.e., modified in that the cursor position against the wall is reported to the host by the local microprocessor rather than the actual position of the mouse through the wall.

From the definition of clipping, it can be seen that a clipped spring force corresponds to applying a force to the user to create a sensation that the cursor has reached a stop position beyond which it cannot travel. The mouse position is still being sensed. The difference is that the software interprets the position as a stop position and does not move the cursor. This is very different than disabling the cursor control system during tactile feedback.

Further, Rosenberg and Barber fail to teach, disclose or suggest a suppression circuit. More specifically, the fail to show a suppression circuit coupled to the driver circuit and the cursor control apparatus

Since each and every feature of the claimed invention is not shown or suggested in the cited references, it respectfully requested that this rejection be withdrawn.

Dependent claims 2-6 depend from independent claim 1 and add additional patentabale features and are allowable therewith.

8

Dependent claims 8-15 depend from independent claim 7 and add additional patentabale features and are allowable therewith.

Dependent claim 17 depends from independent claim 16 and adds additional patentabale features and is allowable therewith.

A notice of allowance is respectfully requested.

Respectfully submitted,

Mark P. Bourgeois
Reg. No. 37,782
(574) 293-7511